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REMARKS

In the present Office Action, claims 1-25, 27-29 and 31 are pending and are being examined. Claims 1-25 and 27-29 and 31 have been rejected by the Examiner.

By this Amendment, claim 14 has been amended. No new matter has been added. Accordingly, claims 1-25, 27-29 and 31 are presented for further examination. By this Amendment, all claims are believed to be in condition for allowance.

Claim Rejections under 35 USC 112

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention based on the allegedly objectionable word "contains". This word has been replaced with "has" in order to overcome this rejection based on a suggestion from the Examiner at page 3 of the outstanding Office Action. The Examiner is respectfully thanked for this suggestion.

Claim Rejections under 35 USC 103(a)

Claims 1-25 and 27-31 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Housel et al (U.S. 6,103,822) in view of Koistinen et al (WO 98/50338).

The claims stand rejected under 35 USC 103 as allegedly obvious over U.S. Patent No. 6,103,822 to Housel, et al. in view of WO 98/50338 to Koistinen, et al. This rejection is believed to be untenable.

Housel, et al. discloses polymeric acid functional polyols which are the reaction product of at least one hydroxyl-terminated polymer and a nonaromatic anhydride. Acid functional polyols according to Housel, et al. having the preferred hydroxyl functionality and acid and hydroxyl values can be derived from a reaction of either: (1) a nonaromatic polyanhydride with at least one polymer; or (2) at least one polyol and/or dicarboxylic acid with a component having at

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least two unhindered functional groups and at least one hindered carboxylic acid functional group. Further, Housel, et al. discloses the use of an organometallic catalyst, such as organotin to control the reaction.

It is stated at page 5 of the outstanding Office Action that Housel et al discloses the use of catalysts other than organometallic catalysts by virtue of the words "Minor amount of catalysts..." appearing at column 8; line 1 of that patent. However, those words from the reference are not supported by the disclosure of any specific catalysts or classes of catalysts in the reference other than those within the class identified as organometallic. Accordingly, there is no teaching or suggestion in Housel et al that would motivate one skilled in the art, upon reading this reference, to try a catalyst other than an organometallic catalyst. Moreover, the use of any catalyst is disclosed as "optional" by Housel et al, and the working examples of this reference do not disclose the use of catalyst in the preparation of the acid functional polyols disclosed therein. Accordingly, upon reading this reference one of skill in the art would either use no catalyst, or would use an organometallic one. Moreover, the disclosure in Housel et al of 0 to 30,000 ppm of catalyst is not suggestive of the instantly claimed range of 5 to 500 ppm.

Housel refers at page 8, lines 3 to 9 to the problems associated with catalysts in the statement "If the reaction, through the use of certain catalysts or a temperature which is too low, occurs too slowly, conversion to an acid functional polyol will take too long. However, if as a result of the use of particular catalysts or a temperature which is too high, the reaction proceeds too quickly, unwanted side reactions, as discussed above, could occur." Housel, et al. raises these potential problems, but neither discloses nor suggests any solution.

Housel, et al. does not disclose or suggest any acid catalyst as instantly claimed, but rather organometallic catalysts, such as organotin, and amine catalysts, at column 13 lines 11-24 of that patent.

At page 13 of the Office Action it is stated that "[t]herefore it would have been obvious to the skillful artisan in the art to be motivated to employ Koistinen's et al. hydrochloric acid into the Housel et al process as an alternative to the Housel's et al tin oxide because the skilled artisan in the art would expect such a modification to be successful and effective as guidance shown in

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Koistinen et al.” Applicants respectfully disagree, and submit that there is no suggestion or motivation to combine the disclosure of Koistinen, et al. with the disclosure of Housel, et al. Further, if the disclosures are combined, the combined teachings run counter to the present invention.

Koistinen, et al. discloses a process for manufacturing polyol complex esters. According to the method, a polyol, such as BEPD or NPG, is reacted with mono- and polyvalent acids in the presence of a catalyst to produce a reaction blend containing complex esters. More specifically, as disclosed in all of the working examples of Koistinen, et al., complex esters of BEPD (2-butyl-2-ethyl-1,3-propanediol) were manufactured by combining BEPD and saturated linear or branched monocarboxylic acid or unsaturated carboxylic acid and diacid. While acid catalysts, such as sulphuric acid and hydrochloric acid, are disclosed at page 3 lines 11-19 of the Koistinen et al, the sole catalyst employed in all of the working examples was tin oxide. Furthermore, the high amount of catalyst loading taught at page 3, lines 18-19 of this reference, and in the working examples, teach away from the instantly claimed range.

One of ordinary skill in the art, reviewing the reaction disclosed in Housel, et al. and taking into account the statement concerning potential catalyst problems, would not stray from the teaching set forth in Housel, et al. and therefore would not be motivated to combine the Housel disclosure with the disclosure of Koistinen, et al. Specifically, one of ordinary skill in the art would not be motivated to deviate from Housel, et al. by using a catalyst that is from a disparate class than one discussed in the specification if indeed any catalyst is employed in light of the negative consequences disclosed in this reference. Therefore, one of ordinary skill in the art would not look to Koistinen, et al. to modify the catalyst used in Housel, et al.

Furthermore, Applicants submit that even if one of ordinary skill in the art looked to Koistinen, et al. to modify Housel, et al., tin oxide would be used as a catalyst since tin oxide was specified as the catalyst utilized in all of Koistinen’s working examples.

Koistinen alludes to several specific catalysts and classes of catalysts at page 3, lines 15-19 thereof, without disclosing a preference for any particular catalyst. The working examples

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employ tin oxide at a high 0.15 weight percent loading based on the reaction components. This loading level is three times the maximum amount claimed in instant claim 1.

Indeed, the range of catalyst amounts disclosed at page 3, lines 16 to 18 of Koistinen translates to 500 to 5,000 ppm, a range that is not suggestive of the instantly claimed range.

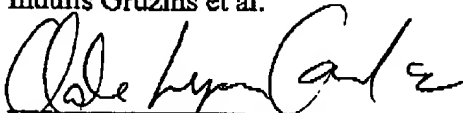
Accordingly, the combined teachings of Koistinen with Housel et al would teach in favor of tin oxide to be used at a loading level above that instantly claimed for the Markush group of acid catalysts.

In conclusion, the combination of the Housel, et al. reference and the Koistinen, et al. reference does not support a prima facie case of obviousness under 35 USC 103(a) with respect to the instant claims. Withdrawal of the outstanding rejection of the claims on an early receipt of a Notice of Allowance thereof are respectfully requested.

If the Examiner has any questions or believes that a discussion with Applicant's attorney would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number below.

Please apply any credits or charge any deficiencies to our Deposit Account No. 23-1665.

Respectfully submitted,
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